AMERICAN MUSEUM NOVITATES

Number 521 | Published by THE AMERICAN MUSEUM OF NATURAL HISTORY New York City | April 11, 1932

59.57, 72 D (7)

NEW SPECIES OF DOLICHOPIDÆ FROM NORTH AMERICA AND CUBA, WITH NOTES ON KNOWN SPECIES

BY M. C. VAN DUZEE

While working up the undetermined Dolichopidæ in The American Museum of Natural History, I found the following species which seem to be undescribed. Five of these are from the W. M. Wheeler collection, now in the Museum; two were taken by Mrs. A. T. Slosson; and the remainder by others interested in the work of the Museum. The types, unless otherwise stated, are in The American Museum of Natural History.

I wish to thank Mr. C. H. Curran and those in charge of the insect collections in the Museum for the privilege of studying these interesting flies.

Chrysosoma plumosa, new species

Length, 5 mm.; length of wing the same.

MALE.—Face below the antennæ slightly wider than the front; lower part about half as wide as upper, violet in the middle, green on the sides and across the middle; seen from above it is wholly grayish-white pollinose. Front shining green, vertex white pollinose; palpi and proboscis yellow, former with yellow hair and black bristles. Antennæ (Fig. 1) yellow with the third segment black; longest bristle on second segment about as long as the diameter of the segment; arista apical, almost bare; beard white, not very long or abundant.

Dorsum of thorax bright shining green, posterior part and scutellum with blue reflections; scutellum with one pair of bristles; metanotum green; pleura dulled with white pollen; posterior edge and some of the incisures yellow. Abdomen shining green with first and base of second segment yellow, the following incisures narrowly yellow; first segment with a rather long, yellow bristle on each side; last segment with two black bristles; venter and hairs on abdomen yellow. Hypopygium (Fig. 2) black with some green color above and yellowish pollen on upper half, its lamellæ yellow, straight, rather narrow, fringed with pale hairs which are rather long at tip; there are some delicate yellow hairs on lower half of hypopygium.

All coxæ, femora, and tibiæ wholly pale yellow, with yellow hair and bristles, except a small black bristle at tip of hind tibiæ and one near tip of front femora; hind coxæ without bristles or hairs on outer surface; tibiæ without bristles, except as mentioned; middle tibiæ with conspicuous hairs above and below, those above a little more delicate, longer, and more erect than those below, they are half as long as diameter of tibia and are continued along the first segment of the tarsi, and on the following segment become more dense and almost pile-like; other tarsi plain; length

of fore tibiæ as 88, middle pair as 124, posterior as 160; segments of fore tarsi as 78–30–22–12–8; of middle as 96–41–34–18–11; of posterior ones as 79–40–25–14–11. Calypters, their cilia, and the halteres pale yellow.

Wings (Fig. 3) grayish hyaline; veins and costa yellow, not darker at tip; first vein reaching about half-way to cross-vein; fourth vein from cross-vein to fork as 40, from fork to wing margin as 26; last section of fifth vein as 21, cross-vein as 52; wings, moderately long and narrow.

Described from one male, taken at Chicago, Illinois, June 17, 1899 (W. M. Wheeler collection).

This specimen comes nearest *amabilis* Parent from Georgia, but that species has rows of hooked bristles on middle tibiæ and basitarsi. Parent puts *amabilis* in the genus *Sciapus* although it has a subapical arista. This is the first species known to me from North America that could be put into the genus *Chrysosoma*.

Sciapus trisetosus, new species

Length, 4.5 mm.

MALE.—Face wide, a little narrower below, green, lower part nearly opaque with gray pollen. Front broad, green with blue reflections, vertex moderately excavated and with a few pale hairs; palpi black with pale hair; proboscis yellow. Antennæ black, bristles on second segment scarcely as long as first two antennal segments; beard white, very scanty.

Dorsum of thorax and the scutellum green with blue reflections; scutellum with two bristles, its lower surface and lower edge of metanotum yellow; pleura green, with white pollen. Abdomen shining green, mostly blue or violet on posterior segments, its hairs few and short, black with a few white ones on the sides. Hypopygium (Fig. 4) black, its lamellæ yellowish brown at base, with triangular, blackish tips.

Fore coxæ wholly yellow with a few yellow hairs on anterior surface and black bristles at tip; middle and hind coxæ and the trochanters black; hind coxæ with one black bristle on outer surface; all femora and tibiæ pale yellow; front tibiæ with four pairs of bristles above and three on lower posterior edge; middle tibiæ with a row of ten bristles on basal two-thirds of lower anterior edge and three longer, slender bristles on upper basal fourth; hind tibiæ with two bristles above, one near basal, the other at apical third; femora with a few pale hairs below and little black bristles near tip; front and middle tarsi yellowish at base, brown from tip of first segment, the hind tarsi wholly black; front basitarsi with nine, middle with four little bristles below, which are about as long as diameter of segment; hind tarsi with an erect bristle below at base, which is about as long as diameter of tibia; joints of front tarsi about as 120–40–23–11–7; of middle pair as 98–32–23–11–9. Calypters yellow with black tips and yellow cilia; halteres pale yellow.

Wings grayish; costa ciliated with black, curved hairs which are about as long as fifth segment of middle tarsi and not quite erect; these reach tip of second vein beyond which they are short; third vein gently bent backward toward its tip; fork of fourth vein less than a right angle with basal part of fourth vein; fourth vein from cross-vein to fork as 61, from fork to wing margin as 23, last section of fifth vein as 25 and cross-vein as 28.

Described from one male, taken at Gotha, Florida, in March, 1896.

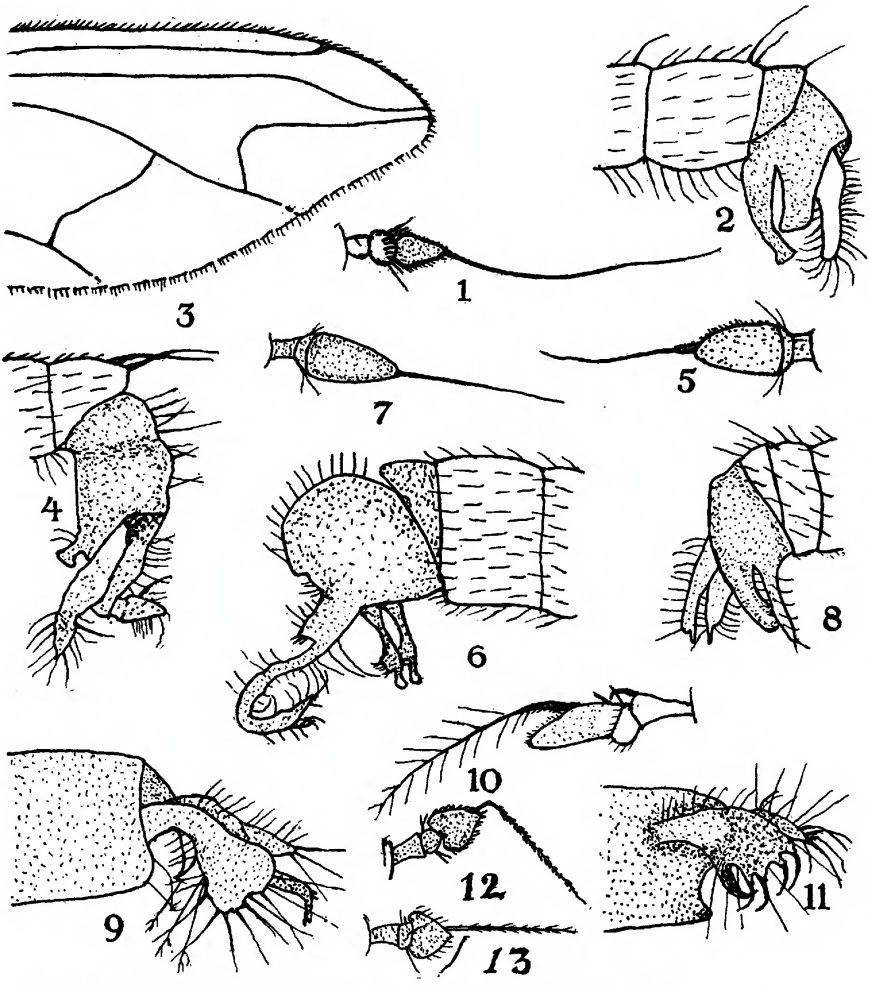

Fig. 1. *Chrysosoma plumosa*, new species. Antenna of male.
" 2. *Chrysosoma plumosa*, new species. Hypopygium of male.
" 3. *Chrysosoma plumosa*, new species. Tip of wing.
" 4. *Sciapus trisetosus*, new species. Hypopygium of male.
" 5. *Rhaphium subfurcatum*, new species. Antenna of male.
" 6. *Rhaphium subfurcatum*, new species. Hypopygium of male.
" 7. *Rhaphium wheeleri*, new species. Antenna of male.
" 8. *Rhaphium wheeleri*, new species. Hypopygium of male.
" 9. *Pelastoneurus fuscitarsis*, new species. Hypopygium of male.
" 10. *Pelastoneurus versicolor*, new species. Antenna of male.
" 11. *Pelastoneurus versicolor*, new species. Hypopygium of male.
" 12. *Diaphorus argentifacies*, new species. Antenna of male.
" 13. *Diaphorus communis*, new species. Antenna of male.

This specimen comes nearest *cilicostalus* Van Duzee, from Jamaica, but differs from it in having more bristles on front tibiæ, and a row of about eight small bristles on anterior surface of middle tibiæ.

Diaphorus communis, new species

Length, 3 mm.

MALE.—Face wide, with parallel sides, about twice as long as wide, silvery white; palpi thickly covered with white pollen and with several small black hairs. Antennæ (Fig. 13) black; third segment moderately large, triangular; arista inserted considerably above the tip, its pubescence short. Front shining green with a little white pollen just above the antennæ, as wide as the face; lower orbital cilia white.

Dorsum of thorax and abdomen shining green with bronze reflections; hairs on dorsum of abdomen short, black, on venter and sides near base long and white; four moderately large bristles at tip of abdomen. Hypopygium small with small, black appendages, central organ long, reaching beyond the hypopygium.

Coxæ and femora green; front coxæ with moderately long, white hair; middle coxæ with black hair; all coxæ with extreme tips and the trochanters yellowish; femora narrowly yellow at tip; front femora with black hair below, which is not very long, the hair on posterior pair longer; all tibiæ wholly pale yellow; anterior tibiæ without bristles, their hair rather short, middle pair with one bristle near the base, posterior ones with seven or more rather large bristles above, without long hair on sides or below; front and middle tarsi brownish from tip of first segment; posterior pair brown, not at all or scarcely yellowish at base; pulvilli of front tarsi enlarged, middle and hind pulvilli but little enlarged; front tarsi one and one-third times as long as their tibia, middle tarsi one-sixth longer and posterior ones one-eighth shorter than their tibia; segments of front tarsi as 28–13–9–6–5; middle pair as 34–16–10–6–5; of posterior pair as 24–17-10–7–5. Calypters and halteres pale yellow, cilia of former white.

Wings a little grayish; third and fourth veins nearly straight and parallel, the fourth ending in the apex of the wing; last section of fifth vein twice as long as the cross-vein.

Described from one male, taken by R. C. Bird, June 12, 1929, in Love Co., Oklahoma.

In the group of species to which this specimen belongs, the form of the antennæ comes nearest *brevinervis* Van Duzee, but the first vein in that species is much shorter and the legs wholly black, the third antennal segment is also much smaller, and the arista is nearly apical; *communis* has the third antennal segment large and the arista inserted considerably above the point; *communis* differs from *usitatus* Van Duzee in having the third antennal segment large. In *usitatus* the third antennal segment is very small with the arista nearly apical, there are also a few white hairs on the middle coxæ and the hind tibiæ are a little brown at tip and their bristles small.

Diaphorus argentifacies, new species

Length, 2.5 mm.

MALE.—Face wide, a little longer than wide, silvery white; palpi small, covered with silvery-white pollen. Front shining blue, the white pollen of the face extending up along the orbits to the middle of the front. Antennæ (Fig. 12) black, third segment about as long as wide, somewhat triangular, arista inserted above the tip; occiput blue-green, quite shining.

Thorax and abdomen shining blue-green, dorsum of thorax mostly blue; hairs on abdomen black, those on the sides and the venter white, the white hairs extending a little on to the dorsum at base of abdomen; bristles at tip of abdomen small but distinct. Hypopygium small, with very small black lamellæ.

Front coxæ green with yellow tips and silvery-white hairs; middle and hind coxæ black; all femora shining blue-green with very narrow yellow tips, posterior pair very slightly brownish at tip; tarsi more or less brownish; joints of front tarsi as 28–13–5–4–5; of posterior pair as 20–19–9–6–5; pulvilli of all tarsi about three-fifths as long as last segment. Calypters, their cilia, and knobs of halteres white.

Wings nearly hyaline, veins blackish; third and fourth veins parallel, slightly arched, fourth ending in apex of wing; last section of fifth vein as 31, cross-vein as 12.

Described from two males, taken by E. L. Bell, June 14, 1930, at Fallon, Nevada.

This would run to Couplet 21 in the table of species in the Bulletin of the Buffalo Society of Natural Sciences, XI, page 164. Both species in that couplet (*rauterbergi* Wheeler and *albiciliata* Van Duzee) have the pollen of the face yellowish or yellowish brown, whereas in *argentifacies* it is silvery white.

Diaphorus slossonæ, new species

Length, 3 mm.

MALE.—Face rather narrow, white pollinose. Front in the middle one-third as wide as the face, wider above and below, white pollinose; palpi and proboscis yellow. Antennæ small, yellow, third segment a little rounded at apex, with a small notch where the apical arista is inserted; lateral and inferior orbital cilia white.

Dorsum of thorax green with considerable white pollen; scutellum blue. Abdomen green with yellow hair; venter yellow; bristles at tip of abdomen rather small. Hypopygium reddish, with small black appendages.

All coxæ, femora, and tibiæ wholly yellow; tarsi yellow with one or two of the apical segments black; coxæ with yellow hairs; femora with their hair partly yellow, especially on lower half; tarsi plain; pulvilli of front tarsi a little enlarged, but not much longer than the claws; front tibiæ about as 57, segments of front tarsi as 30–14–8–7–8. Calypters, their cilia and the halteres yellow.

Wings nearly hyaline with thin yellow veins, costa also yellow; third and fourth veins parallel beyond the cross-vein and with the apex of the wing between their tips; last section of fifth vein twice as long as the cross-vein.

Described from one male, taken by Mrs. A. T. Slosson, at Lake Worth, Florida.

This species is related to *ventralis* Van Duzee, *variabilis* Van Duzee, and *vulsus* Van Duzee; it differs from all of these in having the antennæ

yellow, those mentioned having the antennæ wholly black or blackish brown; *ventralis* and *vulsus* have the yellow of the venter extending on to the sides or over the dorsum of the abdomen. *D. subsejunctus* Loew, which also might be considered here, has the front linear and the antennæ black.

Diaphorus latifacies, new species

Length, 2 mm.

MALE.—Face wide, but little longer than wide, black, covered with gray pollen, making it appear dark gray. Front very narrow in the middle, where the eyes almost touch, the triangles above and below large, colored like the face; palpi brown, almost reddish brown, with black hair. Antennæ black, third segment small, rounded, not quite as long as wide, apex a little flattened; arista apical, a little longer than first segment of front tarsi; orbital cilia wholly black.

Dorsum of thorax opaque with light-brown pollen. Pleura and abdomen black; tip of abdomen with four large bristles. Hypopygium small, with very small black appendages.

Coxæ and femora black, tips of femora very narrowly yellow; front coxæ with black hair; front femora with rather long black hair on the sides, and long, bristly black hairs below, middle and hind femora with shorter black hair below; tibiæ and tarsi yellow, tarsi brownish toward their tips; anterior tibiæ with a row of hairs above, which are about as long as their diameter; middle tibiæ with one small bristle near the base; hind tibiæ with one large bristle at the middle above, and another near the apical fourth, their hair moderately long; anterior tarsi one and one-eighth times longer than their tibia; middle and hind tarsi a very little shorter than their tibiæ; segments of front tarsi as 20–8–7–5–5; of middle tarsi as 16–14–9–6–5; of posterior pair as 16–13–8–6–5; pulvilli a little enlarged. Calypters brown with black cilia; knobs of halteres yellow.

Wings gray; third and fourth veins parallel beyond the cross-vein, a little arched, the apex of the wing lying between their tips; first vein reaching about half-way to tip of second vein; last section of fifth vein as 29, cross-vein as 12 and placed before the middle of the wing; wing widest near the anal angle.

Described from two males, taken by R. D. Bird, July 4, 1930, in Woods Co., Oklahoma.

This species is somewhat like *contiguus* Aldrich from the West Indies. It differs in that *contiguus* has the eyes broadly contiguous, the calypters yellow, and the front tarsi one and one-half times as long as their tibiæ; in *latifacies* the eyes are distinctly separated, even in the middle of the front, and the front tarsi are only one and one-eighth times as long as their tibiæ.

Diaphorus versicolor, new species

Length, 3.7 mm.

MALE.—Eyes contiguous on whole length of the front; face moderately wide, nearly twice as long as wide, grayish-white pollinose, with a few slender white hairs near the orbits; palpi and proboscis black, the former with black, the latter with

white hairs. Antennæ black and short; third segment twice as wide as long; apical edge rounded with a small notch where the arista is inserted, its hair long, arista long and pubescent. Occiput black with gray pollen; lower orbital cilia and the rather long beard white.

Dorsum of thorax green with coppery reflections on anterior half; scutellum blue; front of thorax a little dulled with yellowish-gray pollen; pleura green with gray pollen. Abdomen green; second, fourth and fifth segments with coppery reflections; sixth segment blue-green with four stout bristles, which are fully as long as the segment. Hypopygium with two more stout bristles which are a little shorter; venter yellowish at base; hair on upper part of dorsum of abdomen black; on the sides are a few slender, pale hairs and on the venter long white hair. Hypopygium small, mostly concealed, brown, with very small, black, outer appendages.

Coxæ and femora brown; anterior coxæ with brownish black hair, anterior trochanters and their hairs yellow; middle and hind trochanters brown; femora with white hair and some black bristle-like hairs at base or tip; all tibiæ wholly pale yellow, their hair black; front tibiæ with rows of longer hairs above and below; middle tibiæ with one bristle near base; hind tibiæ with a row of about six bristles above and a row of stiff hairs, some of which are nearly as long as the bristles, they also have long hairs below, which are a little more slender, but nearly as long as those above; tarsi yellow, becoming brown toward the tip; pulvilli yellow, the front and middle ones moderately enlarged; anterior tibiæ as 76, segments of their tarsi as 48–18–12–9–8; the tarsi being about one and one-fourth times as long as tibia, joints of middle tarsi as 53–25–18–7–7, middle tibia as 92; hind tibiæ as 110, the segments of their tarsi as 35–27–18–9–7. Calypters, their cilia, and the halteres yellow.

Wings grayish, costa brown, veins yellowish brown; third and fourth veins nearly straight and parallel beyond the cross-vein, the fourth ending in apex of wing; last section of fifth vein straight, twice as long as cross-vein.

Described from one male taken at Galveston, Texas, in June, 1900 (W. M. Wheeler collection).

This is very much like *tenuipes* Parent, from Panama, but in that species the anterior tarsi are one and one-half times as long as tibia, hind tibiæ with two bristles, brown at tip on apical fifth, the middle pulvilli not enlarged.

Diaphorus texanus, new species

Length, 2 mm.

MALE.—Face as wide as width of one eye, silvery white. Front slightly narrower than the face, white pollinose, but the green ground color showing through; palpi moderately large, about the size of one antenna, yellow, covered with silvery-white pollen. Antennæ wholly black, third segment somewhat triangular, scarcely as long as wide; lower orbital cilia whitish.

Thorax and abdomen green, somewhat dulled with gray pollen. Hairs of abdomen largely yellow, bristles of thorax black; bristles at tip of abdomen short. Hypopygium brown, mostly concealed, its hairs and very small appendages yellow.

Coxæ and femora green; tips of coxæ, trochanters, bases and tips of femora, all tibiæ and tarsi yellow, last segment of tarsi brown; anterior coxæ with a few yellow

hairs; middle tibiæ with one large bristle at basal third; hind tibiæ with one very small bristle near base; pulvilli of front and middle tarsi a very little enlarged; hind tarsi with a row of erect hairs above, which are scarcely as long as width of segments; length of front tibiæ as 42, middle as 50, and of hind ones as 59; segments of front tarsi as 28–11–7–5–5; of middle pair as 22–11–8–5–5; posterior pair as 17–14–9–6–5. Calypters brown with brownish cilia; knobs of halteres yellow.

Wings nearly hyaline, veins yellowish, costa brown; last section of fourth vein straight and parallel with third, ending in apex of wing; last section of fifth vein as 25, cross-vein as 10.

Described from one male, taken at Galveston, Texas, in June, 1900 (W. M. Wheeler collection).

This species is distinguished by its wide, silvery-white face, yellow palpi, rather dull color, green femora, and pale yellow tibiæ and tarsi.

More nearly related to *inornatus* Van Duzee than to any other North American species, but differs in having the palpi wholly yellow and all tarsi almost wholly yellow. *D. inornatus* has the palpi blackened at base, tips of hind tibiæ, their tarsi and front and middle tarsi from tip of first segment, blackish.

Rhaphium subfurcatum, new species

Length, 3.5 mm.

MALE.—Eyes contiguous, leaving a very small triangle below; palpi and proboscis black, with black hairs. Front dark shining green. Antennæ (Fig. 5) black, third segment nearly twice as long as wide, arista nearly bare, not quite twice as long as antenna; beard very sparse (I can see only a few yellowish hairs).

Thorax and scutellum dark green with slight bronze reflections; pleura more black below with a little white pollen, without hair. Abdomen green with coppery reflections; hairs above black, those on the sides brown or yellowish, short; venter black with moderately long pale hairs. Hypopygium (Fig. 6) black, outer lamellæ brown, filiform, with a few slender hairs; at the base there is a wider portion with a slight projection at tip; inner appendages are a pair of straight, yellowish brown, smooth organs with an enlargement near tip, posteriorly, which bears a few minute hairs on apical edge, beyond this is a slightly clavate, white tip.

All coxæ black, bare or nearly so; all femora and hind tibiæ and tarsi black; femora with short white hair, anterior pair with a little longer white hair below; anterior and middle tibiæ and basitarsi yellow, front and middle tarsi black from tip of first segment; hind tibiæ a little enlarged at tip; first segment of front tarsi slightly bent and with a row of very small spines below; segments of front tarsi as 30–21–10–4–3; middle pair as 39–19–12–7–5; first three segments of hind tarsi as 28–25–19. Calypters and halteres yellow, cilia of former white.

Wings in type crumpled, grayish, venation about as usual in the genus.

Described from one male, taken in Carbon County, Wyoming (W. M. Wheeler collection).

This species is easily recognized by the genital characters, the hypopygial appendages being quite distinctive, and there, together with the

wholly black coxæ, femora, and hind tibiæ and tarsi, separate it from all related forms. It would come near *nudum* Van Duzee, from Alaska.

Rhaphium wheeleri, new species

Length, about 3 mm.

MALE.—Eyes contiguous, leaving a small, white pollinose triangle below; palpi small, silvery white pollinose and with silvery white hairs; front blue-green. Antennæ (Fig. 7) black, third segment somewhat triangular, a little more than twice as long as wide, arista apical, one and one-half times as long as third antennal segment, nearly bare; lower orbital cilia white, beard silvery white.

Thorax, scutellum and abdomen shining, dark blue-green; pleura a little dulled with white pollen. Hypopygium (Fig. 8) black, outer lamellæ wide, yellowish brown, fringed with hairs; inner appendages as long as the lamellæ, partly yellow, with hairs on the edge.

Anterior coxæ yellow with long silvery white hair, without bristles; middle and hind coxæ black with white hair, the hairs at apex of middle ones long and bristle-like, but scarcely forming a thorn; all trochanters yellow; front femora broadly yellow at base and tip, blackish in the middle, posterior surface with long white hairs, which are not quite as long as width of femora; middle femora wholly yellow; hind femora yellow on basal half, black on apical half; front and middle tibiæ yellow; posterior tibiæ brown, enlarged toward the tip; hind tarsi wholly black; anterior and middle tarsi yellow, darkened from tip of first segment; segments of anterior tarsi as 23–9–5–5–7; middle pair 30–15–10–5–8; of posterior pair as 25–25–17–10–9. Calypters and halteres yellow, the former with white cilia.

Wings a little grayish; third vein bent backward a little at tip; last section of fourth vein approaches third a little, but is parallel with it at tip, their tips not very close together, fourth ending in apex of wing; last section of fifth vein as 35, cross-vein 14.

Described from one male, taken June 26, 1895, at Milwaukee, Wisconsin (W. M. Wheeler collection).

This species is separated from related forms by the contiguous eyes white hair on posterior surface of front femora, blackish hind tibiæ and the form of the hypopygial appendages. It is near *latifacies* Van Duzee, but that species has the eyes widely separated by the face.

Both species of *Raphium* described here belong to the *Porphyrops* segregate.

Thinophilus variabilis, new species

Length, about 2 mm.

MALE AND FEMALE.—Eyes touching on the middle of the face in the male, the triangle above and below opaque with brown pollen. Face in the female rather narrow, gray pollinose; palpi and proboscis black; front shining violet. Antennæ black; third segment well developed, as long as wide, rounded apically; occiput black with brown pollen; orbital cilia white.

Thorax shining black, sometimes with blue reflections, dorsum dulled with brown pollen. Abdomen shining black with a little brown pollen and slight green reflections,

its hair black; venter with white hairs. Hypopygium of male small, almost concealed under the venter.

Coxæ black, anterior pair with yellow tips and a few minute black hairs; anterior femora usually wholly or mostly yellow, sometimes more or less black above; middle and hind femora black, but sometimes wholly dark yellow; tibiæ yellow, but sometimes more or less brownish; middle and hind tibiæ each with three rather long, slender bristles above, posterior pair with two bristles on lower anterior surface; tarsi plain, more or less brown; segments of middle tarsi as 25–18–10–5–7; of posterior pair as 20–22–14–7–8. Calypters and halteres yellow, cilia of former yellowish to brown.

Wings a little tinged with brown, more so in front, veins brown; in some specimens there is no infuscation of the cross-vein, in others it is distinctly bordered with brown and there is also a brown spot near the middle of the last section of fourth vein, this spot sometimes very distinct, but usually faint or wholly wanting; last section of fourth vein straight, ending in the apex of the wing; third vein bent backward a little toward its tip, so as to approach fourth at tip; last section of fifth vein twice as long as the cross-vein; in the female the third and fourth veins are both nearly straight and parallel beyond the cross-vein.

Described from two males and six females, taken by W. J. Brown, in Quebec; Holotype, allotype and four paratypes were taken at Natashquan, August 8, 1929, and two paratypes at Thunder River, Quebec, June 11. Types in the Canadian National Collection; paratypes in American Museum of Natural History.

If the wings have spots on the veins this would run to *bimaculatus* Johnson, if not it would run to *ochrifacies* Van Duzee; it differs from both of these in having the anterior half of the wing brown, and the front shining violet.

Thinophilus brevipes, new species

Length, 4 mm.

MALE.—Face, front and occiput covered with thick grayish white pollen, the green ground color showing through a little on the vertex; the part of the face below the suture very narrow and with a short point extending down between the palpi, which are large, yellow and covered with white pollen and black hairs. First antennal segment yellow (remaining segments missing in type); orbital cilia and the short beard wholly white.

Thorax coppery, dulled with grayish-white pollen, dorsum with a median green stripe, its bristles inserted in brown dots. Abdomen green, with coppery reflections, black hair and white pollen. Hypopygium and its lamellæ black, closely folded under the abdomen, formed about as usual in the genus.

All coxæ and femora black, anterior femora more or less yellow, especially below; anterior coxæ with white hair; tibiæ yellow with moderately long, slender bristles; tarsi infuscated from tip of first segment; first three segments of front tarsi with a few very long, slender hairs; length of front tibiæ as 64, segments of front tarsi as 28–14–10–10–9; of middle as 37–15–12–11–10. Calypters and halteres dark yellow, the former with white cilia.

Wings grayish hyaline, veins yellow.

FEMALE.—Color of head, body and wings about as in the male; antennæ with third segment mostly brown; palpi larger than in male; all coxæ black, only very narrowly yellow at tip; all femora and tibiæ yellow, anterior femora darker above; front tibiæ as 64, tarsi of equal length, their segments as 26–11–10–9–9, first three segments with a few long slender hairs, but they are shorter than in the male; middle tibiæ as 84, tarsi the same, segments of middle tarsi as 43–12–11–8–10; hind tarsi as 108, tibiæ 90, segments of hind tarsi as 31–27–18–15–17; wings nearly hyaline, veins yellow; third vein bent backward toward tip, last section of fourth vein straight; apex of wing nearer tip of third vein than that of fourth vein; last section of fifth vein as 36, cross-vein as 22.

Holotype, male and allotype, female, mounted on one pin and taken by Mrs. Slosson at Biscayne Bay, Florida; one female paratype was taken at the same place.

The male is easily separated from the male of *prasinus* Johnson, by having the anterior coxæ and middle and hind femora black, with their tips scarcely yellow; the anterior femora are partly or mostly yellowish. In the species described by Johnson the anterior coxæ are yellow on apical half or two-thirds, and the femora are all wholly yellow; the females of the two species are nearly alike, but this species differs in having third and fourth veins parallel and both arched backward toward tip, and the tarsal segments somewhat different, also the front coxæ almost wholly black.

Medetera flavicosta, new species

Length, 2.2 mm.

FEMALE.—Face narrowed below, green with blue reflections; palpi brown with yellow hairs. Front mostly black with spots of blue. Antennæ wholly black, third segment about as long as wide, obtusely pointed, the arista inserted a little above the point; lower orbital cilia white.

Dorsum of thorax green with blue reflections, anterior slope mostly bright violet with a little white pollen. Abdomen shining green, its hair mostly black, a few hairs on the sides near base yellow. Ovipositor yellowish brown; scutellum with one pair of bristles.

Coxæ black with yellow tips, anterior pair with rather long, yellow hairs; femora, tibiæ and tarsi pale yellow, the posterior tarsi with last three segments a little brownish; length of front tibiæ as 40, segments of front tarsi as 20–11–8–5–7; of posterior pair as 15–26–18–8–8; second segment of hind tarsi one and two-thirds times as long as first; hair of legs and feet almost wholly black. Calypters and halteres pale yellow, cilia of former yellow, but appearing blackish in certain lights.

Wings slightly grayish, costa and veins yellow or yellowish brown, depending on the direction from which they are seen; last section of fifth vein as 20, cross-vein 13.

Described from one female, taken by Mr. C. H. Curran, July 1, 1930, at Cold Spring Harbor, Long Island, N. Y.

This species is much like *novus* Van Duzee, differing in having the antennæ wholly black, and all coxæ black with yellow tips; *novus* has first antennal segment and the front coxæ yellow.

Medetera orbiculata, new species

Length, 3 mm.

MALE.—Face black, rather wide, its sides parallel; palpi small, black. Front nearly opaque with grayish pollen. Antennæ black, third segment round with a slight notch at tip where the arista is inserted; lateral orbital cilia white, a few of the upper cilia and four bristles below black.

Thorax metallic brown with slight purple reflections, dorsum with two stripes of white pollen which extend from the front, uniting in the depressed area which is wholly white pollinose; acrostical bristles black, in two rows, but extremely small; scutellum white pollinose, with two pairs of bristles, outer pair curved and half as large as the straight middle ones. Abdomen dark greenish, covered with thin whitish pollen, its hairs small, yellowish. Hypopygium black, long, rather slender, its appendages yellowish brown, the hypopyguim and its appendages reaching nearly to the base of the venter.

Coxæ, femora, tibiæ and tarsi black, knees yellow; front coxæ with black hair; femora with short white hair below; hind tibiæ with rows of yellow hairs; segments of posterior tarsi as 18–30–16–9–6, second segment one and two-thirds times as long as first. Calypters dark yellow with white cilia; knobs of halteres pale yellow.

Wings a little grayish, costa black, veins brown; last section of fifth vein not reaching the wing margin, its length as 15 measuring to wing margin, cross-vein as 19.

Described from one male, taken at Berkeley, California, May 5, 1926.

This is like *nigripes* Loew, but the first segment of hind tarsi is much longer in proportion to second segment than in that species; it comes nearer *bicolor* Van Duzee from Alaska in that respect, which also has the legs wholly black, but that species has the third antennal segment somewhat pointed, dorsum of thorax without pollinose stripes, acrostical bristles conspicuous and last section of fifth vein nearly twice as long as cross-vein.

Dolichopus tenuimanus, new species

Length, 4 mm.

MALE.—Face narrow, white pollinose, palpi yellow; proboscis yellowish brown. Front dull, dark green. Antennæ wholly yellow, first segment as long as third, third a little longer than wide, abruptly narrowed at middle of upper edge, beyond where the arista is inserted, its apex rounded; lower orbital cilia whitish.

Dorsum of thorax and scutellum purple, except lateral edges of former and center of scutellum; pleura green, with white pollen. Abdomen green, with black hair on the dorsum, lower edge of sides and the venter with a few small white hairs. Hypopygium black with green and copper reflections, its lamellæ yellowish white, somewhat oval, partly concealed in the type, but of normal size.

Coxæ yellow, middle and hind ones a little reddish brown on outer surface; front coxæ with a few minute yellow hairs and several black bristles at tip; all femora and tibiæ wholly yellow; first joint of all tarsi yellow, brown from extreme tip of first segment; anterior tarsi long and slender, not quite one and one-half times as long as tibia; all femora nearly bare below, with only a few minute yellow hairs below; front and middle femora each with one preapical bristle; anterior and posterior tibiæ

without a bristle below; anterior tibiæ with three bristles of increasing length above, their length as 84, middle tibiæ with one pair of bristles below near apical third, their basitarsi with a large bristle above near apical fourth; hind basitarsi with two large bristles above; all tarsi plain; segments of front tarsi as 54–30–21–10–6; of middle pair as 58–50–30–18–8. Calypters, their cilia, and the halteres yellow.

Wings grayish; last section of fourth vein bent near basal third; its tip in front of apex of wing; costa with a very small enlargement at tip of first vein.

Described from one male, taken in June, in the Black Mountains, North Carolina.

This specimen would run in the table of species in the Bulletin of the United States National Museum, No. 116, p. 16, F group, couplet 32, to *celeripes*, but differs from that species in having the antennæ wholly yellow, enlargement of costa smaller, middle basitarsi with a large bristle above, and in the color of the dorsum of thorax.

Pelastoneurus versicolor, new species

Length, 4 mm.

MALE.—Face narrow for the genus, as wide in the middle as the width of the third antennal segment, a little wider above and below, wholly white pollinose, concave above, a little bulging below, suture near lowest third. Front blue, seen from in front it is shining with a spot of white pollen on each side at vertex, viewed from above it is more green, dulled with gray pollen; palpi yellow with black hair. Antennæ (Fig. 10) yellow, third segment twice as long as wide, brown with yellow base; arista feathered with long hairs, first segment bare, with a curved spur at tip above; lower orbital cilia white.

Dorsum of thorax shining green, with a broad coppery stripe which includes the two rows of acrostical bristles; on posterior half there is a large violet space on each side, which is not very well defined; viewed from above there is a nearly round spot of silvery-white pollen on each side at the suture, also a silvery dot above each wing and at the lateral posterior angles; the velvety black stripe above the root of the wings distinct; scutellum green; pleura green, with white pollen. Abdomen shining green with bronze and coppery reflections; seen from the rear there is a coppery stripe up the middle of second, third, and fourth segments, but seen from above these segments have large spots of white pollen on the sides. Hypopygium black with a short peduncular segment; it is rather long and slender, its lamellæ (Fig. 11) blackish, more yellow toward the base.

Coxæ yellow, middle ones blackened on most of outer surface and hind ones to near middle; anterior coxæ with black hair and two bristles; femora and tibiæ yellow; tarsi yellow at base, becoming brown at tip; anterior and posterior tibiæ without a bristle below, middle ones with two bristles on lower anterior surface; segments of anterior tarsi as 30–14–15–12–8; middle pair as 42–25–20–11–9; first three segments of hind tarsi as 31–43–27. Calypters and halteres yellow, cilia of former black.

Wings grayish; cross-vein and bend in fourth vein very slightly infuscated; third vein very slightly bent back at tip; last section of fourth vein bent near basal third, this bend broadly rounded, beyond the bend running nearly straight, but bent backward a little at tip so as to be slightly concave posteriorly; last section of fifth vein a little arched, its length as 25, cross-vein as 15.

Described from a single male, taken by Mr. Gordon, April 12, 1926, at Soledad, Cuba.

This specimen comes nearest *acuticauda* Van Duzee, from Guatemala, but the palpi are yellow, whereas *acuticauda* has black palpi.

Pelastoneurus fuscitarsis, new species

Length, 4 mm.

MALE.—Face in the middle wider than third antennal segment, wider above and below, white pollinose, concave on upper part, a little bulging below, its suture situated near the middle. Front blue-green, dulled with brownish pollen, vertex narrowly violet; palpi black with black hair; antennæ yellow, first segment with hairs above, third about as long as wide, brown at tip, arista feathered with long hairs; orbital cilia black.

Dorsum of thorax green in front, posterior half violet, when viewed from in front it is grayish-brown pollinose and the bristles are inserted in black dots; scutellum green; pleura white pollinose; the black stripe above root of wing distinct; the silvery-white pollinose spot at the suture rather large and scarcely round. Abdomen green with wide black incisures, sides with large spots of white pollen and blue reflections, last segment wholly white pollinose. Hypopygium black with a short peduncular segment, its lamellæ (Fig. 9) black, a little yellowish at base, with a black, hooked portion extending beyond, below at base are several hairs with branched tips and two large, smooth, yellow, horn-like organs, which have minute hairs at tip.

Anterior coxæ, femora, tibiæ and the anterior tarsi yellow; front coxæ with a few black hairs and three bristles; middle coxæ black with yellow tips, hind coxæ blackened on basal half; anterior tibiæ without a bristle below; middle and hind tibiæ with one large bristle near middle of lower anterior surface; middle and hind tarsi almost wholly brown; front tibiæ about as 60, segments of anterior tarsi as 28–12–11–6–11; middle pair as 45–22–22–13–12; of hind tarsi as 29–43–32–20–16. Calypters and halteres yellow, cilia of former black.

Wings gray; third vein nearly straight; last section of fourth vein bent just before apical third; last section of fifth vein only a little curved, its length as 26, cross-vein as 16; hind margin of wing notched at tip of fifth vein; anal angle not at all prominent.

FEMALE.—Face wide, a very little brownish in the middle; front as in the male; bend in last section of fourth vein a little nearer the middle; anal angle of wing more prominent; color about as in the male.

Described from one pair, taken at Soledad, Cuba, April 9, 1926 (J.Bequaert).

Among the species with branched bristles on the hypopygial appendages this one is separated by the form of the hypopygial lamellæ.